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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,399	12/01/2003	Hanan Gothait	P-2070-US1	8894
49443	7590	05/03/2006	EXAMINER	
PEARL COHEN ZEDEK, LLP			BAHTA, KIDEST	
1500 BROADWAY 12TH FLOOR				
NEW YORK, NY 10036			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding..

**Office Action Summary**

Application No.

10/724,399

Applicant(s)

GOTHAIT ET AL.

Examiner

Kidest Bahta

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-33 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8, 17 and 26, the preamble claimed a method for three dimensional printing, however, the body of the claim is not refer any thing about three dimensional modeling. The is no link with the preamble.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

3. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hull et al. (U.S. Patent 5,192,559) in view of Leyden et al. (U.S. 6,270,335).

Regarding claims 1, 2, 8, 9, 11, 17, 19-20, 23, 26 and 28, Hull discloses that a system for three-dimensional printing of a three-dimensional model (abstract), said system composing: said first interface material and said second interface material being different; each of said first interface material and said second interface material

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comprising photopolymer material (column 3, lines 10-15; column 20, lines 1-9); and a source of radiation for curing of at least one of said interface materials (column 12, lines 39-42, column 21, lines 33-35).

Hull fails to disclose a printing head for selectively dispensing a first interface material and a second interface material, first and second material includes reactive acrylates.

Leyden discloses a printing head (Fig. 3, Fig. 4a and 4b) for selectively dispensing a first interface material and a second interface material (Fig. 25a and 25B) first and second material includes reactive acrylates (Table 1)

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Hull with the teachings of Leyden in order to provide a method and apparatus for production of objects with less distortion by controlling how material is dispensed.

Regarding claims 3, 12 and 29, Hull discloses first and second interface materials in a given layer in different mix formulations to form a specified type of material (column 19, lines 63- column 20, lines 16).

Regarding claims 4, 13, 21-22 and 33, Hull discloses that first and second interface materials using radiation, the radiation being any one of a group including ultra-violet radiation, infra-red radiation and E-beam (column 13, line 61-column 14, line 11).

Regarding claims 5-7, 14-16, 24-25 and 30-32, Hull discloses the mix formulation of the first and second interface materials forms a support layer (column 1, lines 44-48), a release layer (column 15, lines 3-8) and model layer (column 10, lines 64-66, Fig. 2B).

4. Claims 10, 18 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Hull et al. (U.S. Patent 5,192,559) in view of Leyden et al. (US 6,270,335) as applied to claims 8, 17 and 26 above, and further in view of Peen et al. (U.S. Patent 5,594,652)

Regarding claims 10, 18 and 27, Hull and Newell disclose all the limitations of claims 8, 17 and 26, however; Hull and Leyden did not specifically disclose that the printing head is an ink-jet printing head. Penn discloses that the printing head is an ink-jet printing head (column 10, line 44-60; column 12, lines 45-51).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teaching of Hull with the teachings of Penn in order to provide decrease the time required to coat the layers.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kidest Bahta whose telephone number is 571-272-3737.

The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kidest Bahta  
  
Primary Examiner

AU 2125

4/25/06